What is claimed is:

1. An adaptive sensor comprising:

a plurality of detectors; and

a plurality of adjustable filters proximate to the plurality of detectors.

2. The sensor of claim 1, wherein the filters are bandpass filters.

3. The sensor of claim 2, further comprising a plurality of actuators connected to the plurality of adjustable filters.

4. The sensor of claim 3, wherein each filter of the plurality of adjustable filters is adjusted by an actuator of the plurality of actuators.

5. The sensor of claim 4, wherein each actuator is an electrostatic actuator.

6. The sensor of claim 5, wherein each detector of the plurality of detectors is a bolometer.

7. The sensor of claim 6, wherein each filter is a Fabry-Perot filter.

8. The sensor of claim 7, wherein the plurality of detectors, the plurality of adjustable filters and the plurality of actuators are situated in a package.

9. The sensor of claim 8, wherein the plurality of detectors is situated on a first wafer.

10. The sensor of claim 9, wherein the plurality of adjustable filters is situated on a second wafer.

11. The sensor of claim 10, wherein the second wafer is a topcap situated on the first wafer thereby enclosing the

plurality of detectors and the plurality of adjustable filters.

12. The sensor of claim 11, wherein the first and second wafers form an integrated vacuum package.

13. The sensor of claim 12, wherein each filter may be adjusted to pass a narrow band of light at a wavelength between about 1 micron and 13 microns.

14. The sensor of claim 13, wherein each filter may be adjusted to pass broadband light between about 1 and 13 microns.

15. The sensor of claim 14, wherein the second wafer has an IR transparent window.

16. A means for detecting comprising:

a means for detecting light; and

a means for filtering light proximate to the means for detecting light; and

wherein the means for filtering light has an adjustable bandpass.

17. The means of claim 16, further comprising means for adjusting connected to the means for filtering.

18. The means of claim 17, wherein the adjustable bandpass may be set to a narrow bandpass at a wavelength between one micron and thirteen microns.

19. The means of claim 18, wherein the adjustable bandpass may be set to a broad bandpass covering a range of wavelengths at least from about one micron to thirteen microns.

20. The means of claim 19, wherein the means for detecting light and for filtering light are situated in a means for enclosing.

21. A method for detecting comprising:

providing a detector;

placing a filter proximate to the detector;

adjusting the filter to a desired wavelength; and

directing the filter and detector towards a target.

22. The method of clam 21, further comprising observing the target with the filter and detector.

23. The method of claim 22, wherein the filter may be selectively adjusted to a narrow bandpass or a broad bandpass wavelength.

24. A sensor comprising:

an array of detectors; and

an array of tunable etalons; and

wherein each etalon of the array of tunable etalons is tunable to provide narrow band and broad band

transmittance of light to a detector of the array of detectors.

25. The sensor of claim 24, wherein each etalon comprises an actuator to tune the etalon.

26. The sensor of claim 25, wherein each etalon is tunable independently of the other etalons of the array of tunable etalons.

27. The sensor of claim 26, wherein each etalon may be narrow band tuned to a selected wavelength of light for detection by a detector.

28. The sensor of claim 27, wherein each etalon may be broad band tuned to a plurality of wavelengths of light for detection by a detector.

29. The sensor of claim 28, wherein:

the array of detectors is incorporated in a first chip;

the array of tunable etalons is incorporated in a second chip; and

the second chip may be placed on the first chip such that each etalon is aligned with a detector.

30. The sensor of claim 28, wherein:

the array of detectors is an array of bolometers;

the array of etalons is an array of Fabry-Perot etalons; and

the actuator of each etalon is an electrostatic actuator.

31. The sensor of claim 29, wherein:

the second chip is a topcap;

the first chip is a base; and

a bonding of the topcap to the base forms an integrated package.

32. The sensor of claim 31, wherein the integrated package is internally sealed from its ambient environment.

33. The sensor of claim 31, wherein the first and second chips are bonded on a die-to-die basis.

34. The sensor of claim 31, wherein the first and second chips are bonded on a wafer-to-wafer basis.